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(54) TWO-WAY IMAGE TRANSMISSION CONVERSATION SYSTEM

(57)Abstract:

PURPOSE: To form a psychological common space for both talkers by displaying a background video image onto a video display section of an opposite party person in place of a video image of a talker picked up by a video image pickup section and allowing the other party talker to hear a modified voice of the talker.

CONSTITUTION: When the selection of a video image to be displayed on a TV monitor 30 of a talker 10 being a counselor is finished by a talker 11 being a client, the conversation by the talkers 10, 11 is made available. A video selection section 61 and a background video image storage section 70 make a commanded operation based on the information selected by a control unit 81. The selection section 61 selects a video image sent from a camera 21 or a background video image extracted from the storage section 70 based on the information from the unit 81. When the display of the background image is selected in place of the display of the video image of the talker 11 itself on the monitor 30 of the talker 10, the background video image selected in a database of the storage section 70 is outputted based on the information of the unit 81.
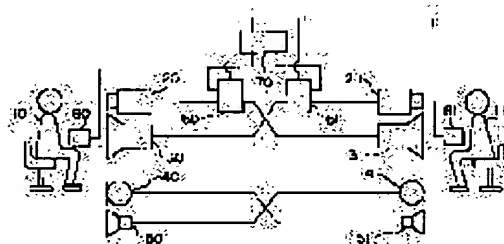
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CLAIMS

[Claim(s)]
[Claim 1] The background image storage section which talks by bidirectional picture transmission between the 1st conversation person and the 2nd conversation person and which is a bidirectional picture transmission conversational system and memorizes a background image, The 1st image selection section which chooses one side of the 1st background image taken out from the image sent from said 1st image photography section [which photos the image by the side of said 1st conversation person], and 1st image photography section side, and said background image storage section, The 1st graphic display section which displays the image sent from said 1st image selection section side on said 2nd conversation person side, The 2nd image photography section which photos the image by the side of said 2nd conversation person, and the 2nd graphic display section which displays the image sent from said 2nd image photography section side on said 1st conversation person side, The 1st voice input section which inputs the voice by the side of said 1st conversation person, and the 1st voice output section which outputs the voice sent from said 1st voice input section side to said 2nd conversation person side, The bidirectional picture transmission conversational system characterized by having the 2nd voice input section which inputs the voice by the side of said 2nd conversation person, and the 2nd voice output section which outputs the voice sent from said 2nd voice input section side to said 1st conversation person side.
[Claim 2] The bidirectional picture transmission conversational system according to claim 1 characterized by having further the 2nd image selection section which chooses one side of the 2nd background image taken out from the image sent from said 2nd image photography section side, and said background image storage section, and is outputted to said 2nd graphic display section side.
[Claim 3] The bidirectional picture transmission conversational system according to claim 1 characterized by having further the 1st image-processing section which carries out the image processing of the image sent from said 1st image photography section side, and said 1st background image, and is outputted to said 1st image selection section side.
[Claim 4] The bidirectional picture transmission conversational system according to claim 2 characterized by having further the 2nd image-processing section which carries out the image processing of the image sent from said 2nd image photography section side, and said 2nd background image, and is outputted to said 2nd image selection section side.
[Claim 5] The background image memorized by said background image storage section is a bidirectional picture transmission conversational system according to claim 1 characterized by being a static image.
[Claim 6] The background image memorized by said background image storage section is a bidirectional picture transmission conversational system according to claim 1 characterized by being a dynamic image.
[Claim 7] Said 1st background image and said 2nd background image are a bidirectional picture transmission conversational system according to claim 2 characterized by the same thing.
[Claim 8] Said 1st image-processing section is a bidirectional picture transmission conversational system according to claim 3 characterized by carrying out image composition of the image sent from

said 1st image photography section side, and said 1st background image.

[Claim 9] Said 1st image-processing section is a bidirectional picture transmission conversational system according to claim 3 characterized by performing profile extract processing of the image sent from said 1st image photography section side.

[Claim 10] Said 2nd image-processing section is a bidirectional picture transmission conversational system according to claim 4 characterized by carrying out image composition of the image sent from said 2nd image photography section side, and said 2nd background image.

[Claim 11] Said 2nd image-processing section is a bidirectional picture transmission conversational system according to claim 4 characterized by performing profile extract processing of the image sent from said 2nd image photography section side.

[Claim 12] The bidirectional picture transmission conversational system according to claim 1 characterized by having further the 1st speech processing section which carries out [voice / 1st / voice / which has been sent from said background phonetic memory section / which memorizes background voice /, and 1st voice input section side /, and / which was taken out from said background phonetic memory section / background] speech processing, and which is outputted to said 1st voice output section side.

[Claim 13] The bidirectional picture transmission conversational system according to claim 12 characterized by having further the 2nd speech processing section which carries out [voice / 2nd / voice / which has been sent from said 2nd voice input section side /, and / which was taken out from said background phonetic memory section / background] speech processing, and which is outputted to said 2nd voice output section side.

[Claim 14] Said 1st background voice and said 2nd background voice are a bidirectional picture transmission conversational system according to claim 13 characterized by the same thing.

[Claim 15] It is the bidirectional picture transmission conversational system according to claim 1 which said 1st voice output section is headphone, and is characterized by said 1st voice input section being the microphone which was united with said 1st voice output section.

[Claim 16] It is the bidirectional picture transmission conversational system according to claim 15 which said 2nd voice output section is headphone, and is characterized by said 2nd voice input section being the microphone which was united with said 2nd voice output section.

[Claim 17] The bidirectional picture transmission conversational system according to claim 1 characterized by having said two or more sorts of 1st voice input sections, and being used, choosing one of said the 1st voice input section of these two or more kinds.

[Claim 18] The bidirectional picture transmission conversational system according to claim 17 characterized by having said two or more sorts of 2nd voice input sections, and being used, choosing one of said the 2nd voice input section of these two or more kinds.

[Claim 19] The bidirectional picture transmission conversational system according to claim 1 characterized by having said two or more sorts of 1st voice output sections, and being used, choosing one of said the 1st voice output section of these two or more kinds.

[Claim 20] The bidirectional picture transmission conversational system according to claim 19 characterized by having said two or more sorts of 2nd voice output sections, and being used, choosing one of said the 2nd voice output section of these two or more kinds.

[Translation done.]

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Industrial Application] This invention relates to the bidirectional picture transmission conversational system with which a conversation person can realize conversation using pictorial communication.
[0002]
[Description of the Prior Art] Conventionally, it is indicated by "JP,62-269128,A" as equipment used for a bidirectional picture transmission conversational system. With this equipment, while photoing the image of the conversation person who becomes a photographic subject by preparing a half mirror between a conversation person and the image photography section in the image photography section, that conversation person looks at the image displayed on the graphic display section through the half mirror. Therefore, according to this equipment, the direction of a look in case a conversation person gazes at the graphic display section is in agreement with the input optical axis of the image photography section. For this reason, bidirectional conversation whose look of conversation persons corresponded is realized.
[0003] Moreover, the equipment of a configuration of having arranged the image photography section behind this equipment is indicated by "JP,4-213287,A" using the graphic display section which can change reflection/transparency of light by time sharing. Since a conversation person's look is turned to the image photography section arranged back at the graphic display section, i.e., **, according to this equipment configuration, bidirectional conversation whose look of conversation persons corresponded is realized.
[0004]
[Problem(s) to be Solved by the Invention] The two above-mentioned conventional examples make both the conversation person's look in agreement, realize more natural bidirectional conversation, and are aiming at the improvement only paying attention to the hardware side. However, the examination about to what kind of scene it applies is not made, and consideration of an actual conversation person's mental side face is not made. So, there is a trouble that it may not be suitable for use with a conversation person's state of mind etc.
[0005] For example, it is the case where this equipment is used for counseling. Since the counselor who receives counseling can speak neither about a self trouble nor a consultation thing freely if its sight is caught by counselor, the psychology where he does not want for its sight to be caught by counselor may work. On the other hand, counselor has the case where he wants to show the scenery image of arbitration or to tell background music of arbitration as opposed to a counselor for making the ambient atmosphere about which is made to make the state of mind which relaxed the counselor, and it is easy to consult etc.
[0006] However, with the equipment by the conventional example, a self image and the background image of arbitration are changed freely, and can be shown to a partner, and, in addition to self voice, it cannot tell against background music, either. So, there is a trouble that the use is restrained, in the field from which the state of mind of conversation persons, such as counseling, poses a problem.
[0007] This invention is made in order to cancel the above-mentioned trouble, and it aims at offering the

bidirectional picture transmission conversational system which can conquer a mental problem and can be suitably used in any situations.

[0008]

[Means for Solving the Problem] The bidirectional picture transmission conversational system concerning this invention The background image storage section which talks by bidirectional picture transmission between the 1st conversation person and the 2nd conversation person and which is a bidirectional picture transmission conversational system and memorizes (1) background image, (2) -- the 1st image photography section which photos the image by the side of said 1st conversation person, and (3) -- with the 1st image selection section which chooses one side of the 1st background image taken out from the image sent from said 1st image photography section side, and said background image storage section (4) The 1st graphic display section which displays the image sent from said 1st image selection section side on said 2nd conversation person side, (5) -- the 2nd image photography section which photos the image by the side of said 2nd conversation person, and (6) -- with the 2nd graphic display section which displays the image sent from said 2nd image photography section side on said 1st conversation person side (7) -- the 1st voice input section which inputs the voice by the side of said 1st conversation person, and (8) -- with the 1st voice output section which outputs the voice sent from said 1st voice input section side to said 2nd conversation person side (9) -- the 2nd voice input section which inputs the voice by the side of said 2nd conversation person, and (10) -- it is characterized by having the 2nd voice output section which outputs the voice sent from said 2nd voice input section side to said 1st conversation person side.

[0009] Moreover, the bidirectional picture transmission conversational system concerning this invention may be further equipped with the 2nd image selection section which chooses one side of the 2nd background image taken out from the image sent from said 2nd image photography section side, and said background image storage section, and is outputted to said 2nd graphic display section side.

[0010] Moreover, the bidirectional picture transmission conversational system concerning this invention may be further equipped with the 1st image-processing section which carries out the image processing of the image sent from said 1st image photography section side, and said 1st background image, and is outputted to said 1st image selection section side. In addition, you may have further the 2nd image-processing section which carries out the image processing of the image sent from said 2nd image photography section side, and said 2nd background image, and is outputted to said 2nd image selection section side.

[0011] Moreover, the background image memorized by said background image storage section may be a ** static image, and may be a ** dynamic image.

[0012] Moreover, said 1st background image and said 2nd background image may be the same.

[0013] moreover, said 1st image-processing section -- ** -- what carries out image composition of the image sent from said 1st image photography section side, and said 1st background image -- you may be -- ** -- profile extract processing of the image sent from said 1st image photography section side may be performed. in addition, said 2nd image-processing section -- ** -- what carries out image composition of the image sent from said 2nd image photography section side, and said 2nd background image -- you may be -- ** -- profile extract processing of the image sent from said 2nd image photography section side may be performed.

[0014] the background phonetic memory section the bidirectional picture transmission conversational system concerning this invention remembers (1) background voice to be and (2) -- you may have further the 1st speech processing section which carries out [voice / 1st / voice / which has been sent from said 1st voice input section side /, and / which was taken out from said background phonetic memory section / background] speech processing and which is outputted to said 1st voice output section side. [moreover,] (3) -- you may have further the 2nd speech processing section which carries out [voice / 2nd / voice / which has been sent from said 2nd voice input section side /, and / which was taken out from said background phonetic memory section / background] speech processing and which is outputted to said 2nd voice output section side. [in addition,]

[0015] Moreover, said 1st background voice and said 2nd background voice may be the same.

[0016] Moreover, said 1st voice output section may be headphone, and said 1st voice input section may be the microphone which was united with said 1st voice output section. In addition, said 2nd voice output section may be headphone, and said 2nd voice input section may be the microphone which was united with said 2nd voice output section.

[0017] Moreover, it is good also as having said two or more sorts of 1st voice input sections, and being used, choosing one of said the 1st voice input section of these two or more kinds. In addition, it is good also as having said two or more sorts of 2nd voice input sections, and being used, choosing one of said the 2nd voice input section of these two or more kinds.

[0018] Moreover, it is good also as having said two or more sorts of 1st voice output sections, and being used, choosing one of said the 1st voice output section of these two or more kinds. In addition, it is good also as having said two or more sorts of 2nd voice output sections, and being used, choosing one of said the 2nd voice output section of these two or more kinds.

[0019]

[Function] The background image of an animation or a still picture is beforehand stored in the background image storage section as a database.

[0020] The 1st image photography section photos the image by the side of the 1st conversation person, and sends it to a 1st image selection section side. The 1st image selection section chooses one side of the image sent from the 1st image photography section side, and the 1st background image taken out from the background image storage section, and sends it to a 1st graphic display section side. The 1st graphic display section displays the image sent from the 1st image selection section side on a 2nd conversation person side.

[0021] The 2nd image photography section photos the image by the side of the 2nd conversation person, and sends it to a 2nd graphic display section side. The 2nd graphic display section displays the image sent from the 2nd image photography section side on a 1st conversation person side. When it has the 2nd image selection section further, the 2nd image selection section chooses one side of the image sent from the 2nd image photography section side, and the 2nd background image taken out from the background image storage section, and delivery and the 2nd graphic display section display the image sent from the 2nd image selection section side on a 2nd graphic display section side at a 1st conversation person side.

[0022] The 1st voice input section inputs the voice by the side of the 1st conversation person, and sends it to a 1st voice output section side. The 1st voice output section outputs the voice sent from the 1st voice input section side to a 2nd conversation person side. The 2nd voice input section inputs the voice by the side of the 2nd conversation person, and sends it to a 2nd voice output section side. The 2nd voice output section outputs the voice sent from the 2nd voice input section side to a 1st conversation person side.

[0023] When it has the 1st image-processing section further, moreover, the 1st image-processing section The image processing of the image photoed in the 1st image photography section and the 1st background image taken out from the background image storage section is carried out. Delivery and the 1st image selection section choose one side of the image by which the image processing was carried out, and the 1st background image to a 1st image selection section side for the image by which the image processing was carried out, and the 1st graphic display section displays the selected image. this image processing -- ** -- the processing which carries out image composition of the image and the 1st background image which were photoed in the 1st image photography section, and ** -- it is the processing which extracts the profile of the image photoed in the 1st image photography section.

[0024] in addition, when it has the 2nd image-processing section further The 2nd image-processing section carries out the image processing of the image photoed in the 2nd image photography section, and the 2nd background image taken out from the background image storage section. Delivery and the 2nd image selection section choose one side of the image by which the image processing was carried out, and the 2nd background image to a 2nd image selection section side for the image by which the image processing was carried out, and the 2nd graphic display section displays the selected image. this image processing -- ** -- the processing which carries out image composition of the image and the background image of 21 which were photoed in the 2nd image photography section, and ** -- it is the processing

which extracts the profile of the image photoed in the 2nd image photography section.

[0025] Moreover, if the 1st background image and the 2nd background image.which are taken out from the background image storage section are made the same, the 1st graphic display section and the 2nd graphic display section will display the same background image.

[0026] Moreover, when it has further the background phonetic memory section and the 1st speech processing section, the 1st speech processing section carries out [voice / 1st / voice / which has been sent from the 1st voice input section /, and / which was taken out from the background phonetic memory section / background] speech processing, and delivery and the 1st voice output section output the voice by which speech processing was carried out to a 1st voice output section side at a 2nd conversation person side.

[0027] In addition, when it has the 2nd speech processing section further, the 2nd speech processing section carries out [voice / 2nd / voice / which has been sent from the 2nd voice input section /, and / which was taken out from the background phonetic memory section / background] speech processing, and delivery and the 2nd voice output section output the voice by which speech processing was carried out to a 2nd voice output section side at a 1st conversation person side.

[0028] Moreover, if there is the same the 1st background voice and the 2nd background voice which are taken out from the background phonetic memory section, the 1st voice output section and the 2nd voice output section will output the same background voice.

[0029] Moreover, when it has two or more sorts of 1st voice input sections and considers as the mode which can carry out selection use, the 1st conversation person chooses and uses the voice input section of arbitration from the voice input section of these two or more kinds. In addition, when it has two or more sorts of 2nd voice input sections and considers as the mode which can carry out selection use, the 2nd conversation person chooses and uses the voice input section of arbitration from the voice input section of these two or more kinds.

[0030] Moreover, when it has two or more sorts of 1st voice output sections and considers as the mode which can carry out selection use, the 1st conversation person chooses and uses the voice output section of arbitration from the voice output section of these two or more kinds. In addition, when it has two or more sorts of 2nd voice output sections and considers as the mode which can carry out selection use, the 2nd conversation person chooses and uses the voice output section of arbitration from the voice output section of these two or more kinds.

[0031] Conversation of the headphone with a microphone of one apparatus, then a more natural form is realized for the 1st voice input section and the 1st voice output section. Similarly, conversation of the headphone with a microphone of one apparatus, then a more natural form is realized for the 2nd voice input section and the 2nd voice output section.

[0032]

[Example] Hereafter, the example of this invention is explained to a detail with reference to an accompanying drawing. In addition, in explanation of a drawing, the same sign is given to the same element, and the overlapping explanation is omitted.

[0033] First, the 1st example is explained. Drawing 1 is the block diagram of the bidirectional picture transmission conversational system concerning the 1st example of this invention.

[0034] The bidirectional picture transmission conversational system concerning this example The background image storage section 70 which memorizes a background image beforehand, and the camera 20 which photos the conversation person 10, The image selection section 60 which chooses one side of the image photoed with the camera 20, and the background image taken out from the background image storage section 70, The TV monitor 31 which displays the image chosen in the image selection section 60 to the conversation person 11, The microphone 40 which inputs the conversation person's 10 voice, and the loudspeaker 51 which outputs the conversation person's 10 voice inputted with the microphone 40 to the conversation person 11, The control unit 80 for the conversation person 10 to control the background image storage section 70 and the image selection section 60, The image selection section 61 which chooses one side of the camera 21 which photos the conversation person 11, the image photoed with the camera 21, and the background image taken out from the background image storage section 70,

The TV monitor 30 which displays the image chosen in the image selection section 61 to the conversation person 10, It consists of the microphone 41 which inputs the conversation person's 11 voice, a loudspeaker 50 which outputs the conversation person's 11 voice inputted with the microphone 41 to the conversation person 10, and a control unit 81 for the conversation person 11 to control the background image storage section 70 and the image selection section 61.

[0035] The background image displayed on the TV monitors 30 and 31 is beforehand stored in the background image storage section 70 as a database. The image of arbitration, such as a landscape, pictures, an image of animals and plants, and animation, is memorized as a background image here. Any of a still picture and an animation are sufficient as a background image. The conversation person 10 can take out the background image of hope through actuation of a control unit 80 if needed. Similarly, the conversation person 11 can take out the background image of hope through actuation of a control unit 81 if needed.

[0036] Opposite arrangement is carried out at the conversation person 10, and a camera 20 photos the conversation person's 10 figure, and sends the image to the image selection section 60. The image selection section 60 chooses one side of the image photoed with the camera 20, and the background image taken out from the background image storage section 70, and sends it to the TV monitor 31. When a background image is chosen in the image selection section 60, a background image is taken out from the database of the background image storage section 70 by arbitration, and it is sent to the image selection section 60, and becomes the output of the image selection section 60. Opposite arrangement is carried out and the TV monitor 31 displays the image sent from the image selection section 60 on the conversation person 11 to the conversation person 11. At this time, through a control unit 80, the conversation person 10 specifies selection actuation of the image selection section 60, and takes out the background image of hope from the background image storage section 70.

[0037] Similarly, opposite arrangement is carried out at the conversation person 11, and a camera 21 photos the conversation person's 11 figure, and sends the image to the image selection section 61. The image selection section 61 chooses one side of the image photoed with the camera 21, and the background image taken out from the background image storage section 70, and sends it to the TV monitor 30. When a background image is chosen in the image selection section 61, a background image is taken out from the database of the background image storage section 70 by arbitration, and it is sent to the image selection section 61, and becomes the output of the image selection section 61. Opposite arrangement is carried out and the TV monitor 30 displays the image sent from the image selection section 61 on the conversation person 10 to the conversation person 10. At this time, through a control unit 81, the conversation person 11 specifies selection actuation of the image selection section 61, and takes out the background image of hope from the background image storage section 70.

[0038] Therefore, the conversation person 10 looks at one side of the background image which was chosen and was taken out from the conversation person's 11 image and the background image storage section 70 which were photoed with the camera 21 by the TV monitor 30. Moreover, the conversation person 11 looks at one side of the background image which was chosen and was taken out from the conversation person's 10 image and the background image storage section 70 which were photoed with the camera 20 by the TV monitor 31.

[0039] A microphone 40 is arranged at the conversation person 10 side, inputs the conversation person's 10 voice, and outputs the voice to the loudspeaker 51 arranged at the conversation person 11 side. Similarly, a microphone 41 is arranged at the conversation person 11 side, inputs the conversation person's 11 voice, and outputs the voice to the loudspeaker 50 arranged at the conversation person 10 side. Therefore, the conversation person 10 and the conversation person 11 can talk by the ability hearing a partner's words mutually.

[0040] Next, the case where the bidirectional picture transmission conversational system concerning this example is applied to the counseling field is explained as an example. Make the conversation person 10 into counselor and let the conversation person 11 be a client.

[0041] First, the conversation person 11 who is a client starts use of this system. Immediately after that, the camera 21 by the side of the conversation person 11 does not photo the conversation person's 11

image, and a microphone 41 does not input the conversation person's 11 voice. That is, no information from the conversation person 11 is outputted to the TV monitor 30 and loudspeaker 50 by the side of the conversation person 10 who is counselor. Moreover, the image which directs the actuation which the conversation person 11 should perform first is displayed on the screen of the TV monitor 31 by the side of the conversation person 11. This image is beforehand memorized by the background image storage section 70, is taken out as a background image automatically immediately after starting this system, and is displayed on the TV monitor 31 through the image selection section 60.

[0042] Next, the conversation person 11 who is a client chooses the image which should be displayed on the TV monitor 30 by the side of the conversation person 10 who is counselor according to directions of TV monitor 31 screen. That is, when the conversation person 10 may catch a sight of conversation person 11 self, the self image photoed with the camera 21 is chosen. Moreover, a background image is chosen for a sight of conversation person 11 self to be caught by the conversation person 10. In choosing a background image, it chooses the background image of arbitration from the database of the background image storage section 70 further. The conversation person 11 performs these selections by the control unit 81 arranged at the conversation person 11 side, and they are performed by directing actuation of the background image storage section 70 and the image selection section 61 through a control unit 81.

[0043] Next, after selection of the image which should be displayed on the TV monitor 30 by the side of the conversation person 10 who is counselor by the conversation person 11 who is a client is completed, the propagation conversation of the voice of the conversation person 10 and the conversation person 11 is attained mutually at a partner. An image projects on the TV monitor 30 by the side of the conversation person 10. That is, based on the information chosen by the control unit 81, actuation as the image selection section 61 and the background image storage section 70 were directed is performed. In the image selection section 61, one side of the image sent from the camera 21 and the background image taken out from the background image storage section 70 is chosen and outputted based on the information from a control unit 81. When displaying a background image is chosen instead of displaying the image of conversation person 11 self on the TV monitor 30 by the side of the conversation person 10, the background image chosen from the databases of the background image storage section 70 based on the information from a control unit 81 is outputted. The image which the conversation person 11 chose as the TV monitor 30 by the side of the conversation person 10 as mentioned above is displayed.

[0044] Next, the conversation person 10 who is counselor questions the conversation person 11 who is a client about the contents of consultation toward a microphone 40. The conversation person 11 hears the conversation person's 10 question outputted from the loudspeaker 51, and answers toward a microphone 41. The conversation person 10 hears the reply of the conversation person 11 outputted from a loudspeaker 50. It goes ahead with the conversation between the conversation person 10 and the conversation person 11 similarly hereafter.

[0045] Although the conversation person 10 who is counselor may show the figure of conversation person 10 self to the conversation person 11 who is a client, if he depends on a case, he chooses the background image shown as TV monitor 31 screen to the conversation person 11. For example, in performing a bug test to the conversation person 11, a scenery image is shown, and it carries out asking the conversation person's 11 impression over the image etc., and performs a bug test. On the occasion of this, the conversation person 10 specifies actuation that directions are given to the control unit 80 at hand, and the scenery image concerned is taken out from the database of the background image storage section 70 through this, and it chooses the scenery image concerned in the image selection section 60.

[0046] The conversation person 11 who is a client can change the image shown on TV monitor 30 screen in the middle of advance of counseling to the conversation person 10 who is counselor. Also at this time, the conversation person 11 operates the control unit 81 at hand, and it opts for actuation of the image selection section 61 through this, and it chooses the background image taken out from the database of the background image storage section 70. For example, when the conversation person 11 judges a self figure that the conversation person 10 may see, the image of conversation person 11 self photoed with the camera 21 is made to choose it as the image selection section 61 through a control unit

81, and the conversation person's 11 figure is made to project on the TV monitor 30, and is shown to the conversation person 10.

[0047] As mentioned above, by displaying a background image on the TV monitors 30 and 31, the conversation person 10 and the conversation person 11 acquire subject on a background image, and conversation progresses. Moreover, it becomes the conversation person's individual sexual expression, and conversation will have more individual breadth and the action itself which one conversation person says chooses a background image from databases forms mental common space among both conversation persons. That is, it becomes easy to advance counseling.

[0048] Next, the 2nd example is explained. Drawing 2 R> 2 is the block diagram of the bidirectional picture transmission conversational system concerning the 2nd example of this invention.

[0049] The bidirectional picture transmission conversational system concerning this example The background image storage section 70 which memorizes a background image beforehand, and the background phonetic memory section 110 which memorizes background voice beforehand, The image-processing section 90 which carries out the image processing of the camera 20 which photos the conversation person 10, the image photoed with the camera 20, and the background image taken out from the background image storage section 70, The image selection section 60 which chooses one side of the image by which the image processing was carried out in the image-processing section 90, and said background image, The TV monitor 31 which displays the image chosen in the image selection section 60 to the conversation person 11, The speech processing section 100 which carries out [voice / the microphone 40 which inputs the conversation person's 10 voice, and / the voice of the conversation person 10 inputted with the microphone 40 and the background voice taken out from the background phonetic memory section 110] speech processing, The loudspeaker 51 which outputs the voice by which speech processing was carried out to the conversation person 11 in the speech processing section 100, The control unit 80 for the conversation person 10 to control the background image storage section 70, the background phonetic memory section 110, the image-processing section 90, the image selection section 60, and the speech processing section 100, The image-processing section 91 which carries out the image processing of the camera 21 which photos the conversation person 11, the image photoed with the camera 21, and the background image taken out from the background image storage section 70, The image selection section 61 which chooses one side of the image by which the image processing was carried out in the image-processing section 91, and said background image, The TV monitor 30 which displays the image chosen in the image selection section 61 to the conversation person 10, The speech processing section 101 which carries out [voice / the microphone 41 which inputs the conversation person's 11 voice, and / the voice of the conversation person 11 inputted with the microphone 41 and the background voice taken out from the background phonetic memory section 110] speech processing, It consists of a loudspeaker 50 which outputs the voice by which speech processing was carried out to the conversation person 10 in the speech processing section 101, and a control unit 81 for the conversation person 11 to control the background image storage section 70, the background phonetic memory section 110, the image-processing section 91, the image selection section 61, and the speech processing section 101.

[0050] Here, the components added to the configuration of the 1st example are the background phonetic memory section 110, the image-processing sections 90 and 91, and the speech processing sections 100 and 101. Moreover, the components to which the function was added to the 1st example are control units 80 and 81.

[0051] The image-processing section 90 carries out the image processing of the image photoed with the camera 20, and the background image taken out from the background image storage section 70, and sends the image by which the image processing was carried out to the image selection section 60. The image selection section 60 chooses one side of the image by which the image processing was carried out in the image-processing section 90, and the background image taken out from the background image storage section 70, and sends the selected image to the TV monitor 31. The TV monitor 31 displays the image chosen in the image selection section 60 to the conversation person 11.

[0052] Here, the conversation person 10 specifies ejection of the background image from the

background image storage section 70, selection of the processing facility of the image-processing section 90, and selection actuation of the image selection section 60 through a control unit 80.

[0053] The processing which compounds the person image of the conversation person 10 in the image photoed with the camera 20 on a background image is sufficient as the image processing in the image-processing section 90. Moreover, the processing which extracts the profile of the person image of the conversation person 10 in the image photoed with the camera 20 is sufficient. Moreover, the processing which makes not clear the image photoed with the camera 20 is sufficient. moreover, the image photoed with the camera 20 -- you may remain as it is . Moreover, the processing on which an image which divides a screen and is different in the split screen of ******** is displayed is sufficient. In addition, it is good at the image processing of arbitration. Moreover, it is good also as having two or more image-processing functions, choosing from them, and performing an image processing.

[0054] Similarly, the image-processing section 91 carries out the image processing of the image photoed with the camera 21, and the background image taken out from the background image storage section 70, and sends the image by which the image processing was carried out to the image selection section 61. The image selection section 61 chooses one side of the image by which the image processing was carried out in the image-processing section 91, and the background image taken out from the background image storage section 70, and sends the selected image to the TV monitor 30. The TV monitor 30 displays the image chosen in the image selection section 61 to the conversation person 10.

[0055] Here, the conversation person 11 specifies ejection of the background image from the background image storage section 70, selection of the processing facility of the image-processing section 91, and selection actuation of the image selection section 61 through a control unit 81.

[0056] The image processing in the image-processing section 90 and the processing which compounds similarly the person image of the conversation person 11 in the image photoed with the camera 21 on a background image are sufficient as the image processing in the image-processing section 91. Moreover, the processing which extracts the profile of the person image of the conversation person 11 in the image photoed with the camera 21 is sufficient. Moreover, the processing which makes not clear the image photoed with the camera 21 is sufficient. moreover, the image photoed with the camera 21 -- you may remain as it is . Moreover, the processing on which an image which divides a screen and is different in the split screen of ******** is displayed is sufficient. In addition, it is good at the image processing of arbitration. Moreover, it is good as having two or more image-processing functions, choosing from them, and performing an image processing.

[0057] The background voice outputted to loudspeakers 50 and 51 is beforehand stored in the background phonetic memory section 110 as a database, and the background voice of hope is taken out if needed. The voice of arbitration, such as music, a sound of a wave, a sound of a wind, and an animal, a cry of an insect, is memorized as background voice here.

[0058] The speech processing section 100 carries out [voice / which was taken out from the background phonetic memory section 110 / the voice of the conversation person 10 inputted with the microphone 40, and / background] speech processing, and is outputted to a loudspeaker 51 side. A loudspeaker 51 outputs the voice by which speech processing was carried out to the conversation person 11 in the speech processing section 100.

[0059] Here, the conversation person 10 specifies the ejection of the background voice from the background phonetic memory section 110, and the processing facility of the speech processing section 100 through a control unit 80.

[0060] The processing which compounds voice and background voice of the conversation person 10 inputted with the microphone 40 is sufficient as the processing in the speech processing section 100. Moreover, the processing which deteriorates the conversation person's 10 voice inputted with the microphone 40 is sufficient. moreover, the conversation person's 10 voice inputted with the microphone 40 -- you may remain as it is . In addition, it is good at the speech processing of arbitration. Moreover, it may have two or more speech processing functions, it may choose from them, and speech processing may be performed.

[0061] Similarly, the speech processing section 101 carries out [voice / which was taken out from the

background phonetic memory section 110 / the voice of the conversation person 11 inputted with the microphone 41, and / background] speech processing, and is outputted to a loudspeaker 50 side. A loudspeaker 50 outputs the voice by which speech processing was carried out to the conversation person 10 in the speech processing section 101.

[0062] Here, the conversation person 11 specifies the ejection of the background voice from the background phonetic memory section 110, and the processing facility of the speech processing section 101 through a control unit 81.

[0063] The processing which compounds voice and background voice of the conversation person 11 inputted with the microphone 41 like the processing in the speech processing section 100 is sufficient as the processing in the speech processing section 101. Moreover, the processing which deteriorates the conversation person's 11 voice inputted with the microphone 41 is sufficient. moreover, the conversation person's 11 voice inputted with the microphone 41 -- you may remain as it is . In addition, it is good at the speech processing of arbitration. Moreover, it may have two or more speech processing functions, it may choose from them, and speech processing may be performed.

[0064] Next, the case where the bidirectional picture transmission conversational system concerning this example is applied to the counseling field is explained as an example. In this case, in addition to the contents already described in the 1st example, the following matters become still more possible.

[0065] For example, although it is disagreeable that the conversation person 11 who is a client is looked at in a self figure by the conversation person 10 who is counselor clearly If it is only the profile of the figure of conversation person 11 self, in saying that the conversation person 10 may see The conversation person 11 makes the processing which extracts the profile of a person image in the image-processing section 91 perform through a control unit 81, and makes the output image of the image-processing section 91 choose and output in the image selection section 61.

[0066] moreover, when the conversation person 10 who is counselor wants to show a background image for example, to the conversation person 11 who is a client in addition to the image of conversation person 10 self The conversation person 10 takes out a background image from the background image storage section 70 through a control unit 80. The processing which carries out image composition of the background image taken out from the background image storage section 70 in the image-processing section 90 and the conversation person 10 photoed with the camera 20 is made to perform, and the output image of the image-processing section 90 is made to choose and output in the image selection section 60.

[0067] moreover -- for example, asking self voice to the conversation person 10 who is counselor clearly has the disagreeable conversation person 11 who is a client -- when saying but that the conversation person 11 wants to convey a self opinion etc. to the conversation person 10 by conversation, the conversation person 11 makes the processing which deteriorates voice in the speech processing section 101 perform through a control unit 81

[0068] moreover -- for example, in order for the conversation person 10 who is counselor to make the conversation person 11 who is a client relax In order to perform a bug test etc. to the conversation person 11, to also tell the conversation person 11 background voice in addition to the voice of conversation person 10 self The conversation person 10 takes out background voice from the background phonetic memory section 110, and makes the processing which compounds the conversation person's 10 voice and background voice in the speech processing section 100 perform through a control unit 80.

[0069] As stated above, the conversation person 11 who is a client can make himself the environment about which it is easy to speak to the conversation person 10 who is counselor according to the mental situation of self by carrying out the image processing of the self image and background image, or carrying out [voice / self / voice and background voice] speech processing in the speech processing section 101 in the image-processing section 91.

[0070] On the other hand, the conversation person 10 who is counselor can carry out effective counseling to the conversation person 11 who is a client according to the contents and the situation of counseling by carrying out the image processing of the self image and background image, or carrying

out [voice / self / voice and background voice] speech processing in the speech processing section 100 in the image-processing section 90.

[0071] The united headphone with a microphone may be used as the voice input section 40 and the voice output section 50. Similarly, the united headphone with a microphone may be used as the voice input section 41 and the voice output section 51. In this case, a conversation person can hear voice about which a partner's conversation person whispers through headphone about his ears, and can talk in the condition of having relaxed to the microphone in the month. Moreover, voice which self uttered can be re-**(ed) through headphone, and the self-recognition over conversation deepens. Moreover, since an external noise is intercepted by headphone, it becomes easy to concentrate on conversation. Moreover, since both hands become free, the gesture actuation at the time of conversation becomes abundance. Therefore, the conversation person 10 and the conversation person 11 can talk by the ability having an intimate feeling more, and can advance counseling effectively.

[0072] The artificer conducted the following experiments in order to check the effectiveness of the bidirectional picture transmission conversational system concerning the 2nd example. a part of bidirectional picture transmission conversational system which drawing 3 requires for the 2nd example of this invention with which this experiment was presented -- it is the plot plan of a component.

[0073] To each of two rooms, television of 21inch mold has been arranged as TV monitors 30 and 31. The micro CCD camera with a diameter of 12mm has been arranged between the conversation persons 10 and 11 and the TV monitors 30 and 31 as cameras 20 and 21. About the voice input section and the voice output section, a looking-far microphone, a non-portable loudspeaker, and the headphone 42 and 52 with a microphone were prepared, and free selection by the conversation person who is a test subject was enabled. The transmission distance of an image and voice is about 20m. The above simple look coincidence mold bidirectional picture transmission conversational systems were built, and using this system, it talked to the conversation person included in each room, and was given, and the mental test was performed.

[0074] About the image displayed on TV monitor of the other party, it changed to the image of ** self on which the image of the profile of the image of ** self on which the image of conversation person 10 self photoed with the ** camera 20 is displayed as it is is displayed, and selection by the conversation person 10 was enabled out of 3 passage of ** on which a background image is chosen and displayed.

[0075] In each case, the conversation person 10 needs to perform a suitable setup to the background image storage section 70, the image-processing section 90, and the image selection section 60. That is, face sending the image of conversation person 10 self photoed with the camera 20 to a partner as it is, the image photoed with the camera 20 is made to output in the image-processing section 90 as it is, and the output image of the image-processing section 90 is made to choose in the image selection section 60. Face sending against the image of the profile of a self image, the processing which extracts the profile of the person image in the image photoed with the camera 20 is made to perform in the image-processing section 90, and the output image of the image-processing section 90 is made to choose in the image selection section 60. It changes to a self image and faces choosing a background image and sending to a partner, and the background image of hope is chosen and the background image is made to choose from the background image storage section 70 in the image selection section 60.

[0076] About the voice outputted to the loudspeaker or headphone of the other party, selection by the conversation person 10 was enabled out of 2 passage of ** which chooses ** background music sent only against the voice of ** conversation person 10 self, and is sent to a partner in addition to self voice.

[0077] In each case, the conversation person 10 needs to perform a suitable setup to the background phonetic memory section 110 and the speech processing section 100. That is, it faces sending only against self voice and the self voice inputted with the microphone 42 is made to output in the speech processing section 100 as it is. Background music is chosen, it faces sending to a partner in addition to self voice, the music of hope is chosen from the background phonetic memory section 110, and the processing added to the self voice inputted with the microphone 42 by making the music into background music is made to perform in the speech processing section 100.

[0078] In the above bidirectional picture transmission conversational system, one conversation person was fixed to the same person, and as another conversation person, it talked to six test subjects and was given. The result was as follows.

[0079] About the image, three persons chose to send the self image photoed with the camera 20 to a partner as it is. Two persons chose to send against the image of the profile of a self image, and this also answered that a sufficiently mutual ambient atmosphere was transmitted. One person chose to change to a self image, to choose a background image, and to send to a partner, and answered that he has talked sufficiently happily only now.

[0080] About voice, five persons chose the headphone 42 and 52 with a microphone, and answered that it was easy to carry out conversation with deeper this gentleman. One person chose the looking-far microphone and the loudspeaker, and answered that it was unpleasant that headphone are equivalent to a lug.

[0081] Moreover, all the following six comments were described. by the quality being excellent, if selection actuation is easy, it desires for use of a background image or background voice to be very effective, and for conversation to sometimes boil it, to set it, and to utilize it as an auxiliary means of conversation. In order to receive such a system in many people, the width of face of the various selections corresponding to individual individuality is required. The approach of choosing the background image for which a conversation person wishes, and background voice serves as the point that it is substantial in the database of a background image or background voice, and out of the database. The above comment was obtained.

[0082] In addition, this invention is not limited to the above-mentioned example, and various deformation is possible for it. For example, the graphic display device of a projection mold is sufficient as the graphic display section, and an earphone is sufficient as the voice output section. Although the image selection section and the image-processing section were allotted on the image transmission route of both directions in this example, it may be allotted only on one path and the speech processing section may also be allotted only on one path. Though the ejection of the background image from the background image storage section and the ejection of the background voice from the background phonetic memory section are possible only in one conversation person, they are good. It is good though a setup of the image selection section, the image-processing section, and the speech processing section of operation is also possible only in one conversation person.

[0083]

[Effect of the Invention] As mentioned above, according to this invention, also in the state of mind that a conversation person does not want to see against a self figure, a conversation person becomes possible [describing a self idea and a trouble freely] by changing to a conversation person's image photoed in the image photography section, and displaying a background image on the graphic display section of the other party as explained to the detail. Moreover, it can go ahead with conversation by the ability making a background image into subject by displaying a background image on the graphic display section of the other party in addition to a conversation person's image photoed in the image photography section etc., and both the conversation person's mental common space can be formed.

[0084] The conversation according to a conversation person's state of mind is attained by deteriorating a conversation person's voice and telling a partner also about voice. Moreover, both the conversation person's mental common space can be further formed by telling against background voice in addition to a conversation person's voice.

[0085] If headphone with a microphone are especially used as the voice-input/output section, since it can talk in the condition of having relaxed since the microphone was in the month and a partner's words can be heard clearly about their ears, the intimate feeling between conversation persons increases.

[0086] As mentioned above, it is easy to touch human being's depths psychology with the bidirectional picture transmission conversational system concerning this invention, and it is suitable to use for the counseling about a trouble, self-actualization, etc. For example, it is effective in the counseling which needs the operation to the inner mental side about the alignment of people in very large genres, such as marriage counseling, occupation consultation, course consultation, domestic problem consultation,

childcare consultation, school life consultation, problem consultation in an area, and an economic problem. Furthermore, considering that mere businesslike communication must have been cooperatively materialized for the conversation of people and a man extracting an alignment, either, if it pursues, the bidirectional picture transmission conversational system concerning this invention has possibility that the conversation of all people and men can be suited. That is, the conversation in various modes and situations is attained with the bidirectional picture transmission conversational system concerning this invention.

[Translation done.]

* NOTICES *

TECHNICAL FIELD

[Industrial Application] This invention relates to the bidirectional picture transmission conversational system with which a conversation person can realize conversation using pictorial communication.

[Translation done.]

* NOTICES *

PRIOR ART

[Description of the Prior Art] Conventionally, it is indicated by "JP,62-269128,A" as equipment used for a bidirectional picture transmission conversational system. With this equipment, while photoing the image of the conversation person who becomes a photographic subject by preparing a half mirror between a conversation person and the image photography section in the image photography section, that conversation person looks at the image displayed on the graphic display section through the half mirror. Therefore, according to this equipment, the direction of a look in case a conversation person gazes at the graphic display section is in agreement with the input optical axis of the image photography section. For this reason, bidirectional conversation whose look of conversation persons corresponded is realized.

[0003] Moreover, the equipment of a configuration of having arranged the image photography section behind this equipment is indicated by "JP,4-213287,A" using the graphic display section which can change reflection/transparency of light by time sharing. Since a conversation person's look is turned to the image photography section arranged back at the graphic display section, i.e., **, according to this equipment configuration, bidirectional conversation whose look of conversation persons corresponded is realized.

[Translation done.]

EFFECT OF THE INVENTION

[Effect of the Invention] As mentioned above, according to this invention, also in the state of mind that a conversation person does not want to see against a self figure, a conversation person becomes possible [describing a self idea and a trouble freely] by changing to a conversation person's image photoed in the image photography section, and displaying a background image on the graphic display section of the other party as explained to the detail. Moreover, it can go ahead with conversation by the ability making a background image into subject by displaying a background image on the graphic display section of the other party in addition to a conversation person's image photoed in the image photography section etc., and both the conversation person's mental common space can be formed.

[0084] The conversation according to a conversation person's state of mind is attained by deteriorating a conversation person's voice and telling a partner also about voice. Moreover, both the conversation person's mental common space can be further formed by telling against background voice in addition to a conversation person's voice.

[0085] If headphone with a microphone are especially used as the voice-input/output section, since it can talk in the condition of having relaxed since the microphone was in the month and a partner's words can be heard clearly about their ears, the intimate feeling between conversation persons increases.

[0086] As mentioned above, it is easy to touch human being's depths psychology with the bidirectional picture transmission conversational system concerning this invention, and it is suitable to use for the counseling about a trouble, self-actualization, etc. For example, it is effective in the counseling which needs the operation to the inner mental side about the alignment of people in very large genres, such as marriage counseling, occupation consultation, course consultation, domestic problem consultation, childcare consultation, school life consultation, problem consultation in an area, and an economic problem. Furthermore, considering that mere businesslike communication must have been cooperatively materialized for the conversation of people and a man extracting an alignment, either, if it pursues, the bidirectional picture transmission conversational system concerning this invention has possibility that the conversation of all people and men can be suited. That is, the conversation in various modes and situations is attained with the bidirectional picture transmission conversational system concerning this invention.

[Translation done.]

* NOTICES *

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] The two above-mentioned conventional examples make both the conversation person's look in agreement, realize more natural bidirectional conversation, and are aiming at the improvement only paying attention to the hardware side. However, the examination about to what kind of scene it applies is not made, and consideration of an actual conversation person's mental side face is not made. So, there is a trouble that it may not be suitable for use with a conversation person's state of mind etc.
[0005] For example, it is the case where this equipment is used for counseling. Since the counselor who receives counseling can speak neither about a self trouble nor a consultation thing freely if its sight is caught by counselor, the psychology where he does not want for its sight to be caught by counselor may work. On the other hand, counselor has the case where he wants to show the scenery image of arbitration or to tell background music of arbitration as opposed to a counselor for making the ambient atmosphere about which is made to make the state of mind which relaxed the counselor, and it is easy to consult etc.
[0006] However, with the equipment by the conventional example, a self image and the background image of arbitration are changed freely, and can be shown to a partner, and, in addition to self voice, it cannot tell against background music, either. So, there is a trouble that the use is restrained, in the field from which the state of mind of conversation persons, such as counseling, poses a problem.
[0007] This invention is made in order to cancel the above-mentioned trouble, and it aims at offering the bidirectional picture transmission conversational system which can conquer a mental problem and can be suitably used in any situations.

[Translation done.]

* NOTICES *

MEANS

[Means for Solving the Problem] The bidirectional picture transmission conversational system
concerning this invention The background image storage section which talks by bidirectional picture
transmission between the 1st conversation person and the 2nd conversation person and which is a
bidirectional picture transmission conversational system and memorizes (1) background image, (2) -- the
1st image photography section which photos the image by the side of said 1st conversation person, and
(3) -- with the 1st image selection section which chooses one side of the 1st background image taken out
from the image sent from said 1st image photography section side, and said background image storage
section (4) The 1st graphic display section which displays the image sent from said 1st image selection
section side on said 2nd conversation person side, (5) -- the 2nd image photography section which
photos the image by the side of said 2nd conversation person, and (6) -- with the 2nd graphic display
section which displays the image sent from said 2nd image photography section side on said 1st
conversation person side (7) -- the 1st voice input section which inputs the voice by the side of said 1st
conversation person, and (8) -- with the 1st voice output section which outputs the voice sent from said
1st voice input section side to said 2nd conversation person side (9) -- the 2nd voice input section which
inputs the voice by the side of said 2nd conversation person, and (10) -- it is characterized by having the
2nd voice output section which outputs the voice sent from said 2nd voice input section side to said 1st
conversation person side.
[0009] Moreover, the bidirectional picture transmission conversational system concerning this invention
may be further equipped with the 2nd image selection section which chooses one side of the 2nd
background image taken out from the image sent from said 2nd image photography section side, and
said background image storage section, and is outputted to said 2nd graphic display section side.
[0010] Moreover, the bidirectional picture transmission conversational system concerning this invention
may be further equipped with the 1st image-processing section which carries out the image processing
of the image sent from said 1st image photography section side, and said 1st background image, and is
outputted to said 1st image selection section side. In addition, you may have further the 2nd image-
processing section which carries out the image processing of the image sent from said 2nd image
photography section side, and said 2nd background image, and is outputted to said 2nd image selection
section side.
[0011] Moreover, the background image memorized by said background image storage section may be a
** static image, and may be a ** dynamic image.
[0012] Moreover, said 1st background image and said 2nd background image may be the same.
[0013] moreover, said 1st image-processing section -- ** -- what carries out image composition of the
image sent from said 1st image photography section side, and said 1st background image -- you may be
-- ** -- profile extract processing of the image sent from said 1st image photography section side may be
performed. in addition, said 2nd image-processing section -- ** -- what carries out image composition of
the image sent from said 2nd image photography section side, and said 2nd background image -- you
may be -- ** -- profile extract processing of the image sent from said 2nd image photography section
side may be performed.

[0014] the background phonetic memory section the bidirectional picture transmission conversational system concerning this invention remembers (1) background voice to be and (2) -- you may have further the 1st speech processing section which carries out [voice / 1st / voice / which has been sent from said 1st voice input section side /, and / which was taken out from said background phonetic memory section / background] speech processing and which is outputted to said 1st voice output section side.
[moreover,] (3) -- you may have further the 2nd speech processing section which carries out [voice / 2nd / voice / which has been sent from said 2nd voice input section side /, and / which was taken out from said background phonetic memory section / background] speech processing and which is outputted to said 2nd voice output section side. [in addition,]
[0015] Moreover, said 1st background voice and said 2nd background voice may be the same.
[0016] Moreover, said 1st voice output section may be headphone, and said 1st voice input section may be the microphone which was united with said 1st voice output section. In addition, said 2nd voice output section may be headphone, and said 2nd voice input section may be the microphone which was united with said 2nd voice output section.
[0017] Moreover, it is good also as having said two or more sorts of 1st voice input sections, and being used, choosing one of said the 1st voice input section of these two or more kinds. In addition, it is good also as having said two or more sorts of 2nd voice input sections, and being used, choosing one of said the 2nd voice input section of these two or more kinds.
[0018] Moreover, it is good also as having said two or more sorts of 1st voice output sections, and being used, choosing one of said the 1st voice output section of these two or more kinds. In addition, it is good also as having said two or more sorts of 2nd voice output sections, and being used, choosing one of said the 2nd voice output section of these two or more kinds.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

OPERATION

[Function] The background image of an animation or a still picture is beforehand stored in the background image storage section as a database.
[0020] The 1st image photography section photos the image by the side of the 1st conversation person, and sends it to a 1st image selection section side. The 1st image selection section chooses one side of the image sent from the 1st image photography section side, and the 1st background image taken out from the background image storage section, and sends it to a 1st graphic display section side. The 1st graphic display section displays the image sent from the 1st image selection section side on a 2nd conversation person side.
[0021] The 2nd image photography section photos the image by the side of the 2nd conversation person, and sends it to a 2nd graphic display section side. The 2nd graphic display section displays the image sent from the 2nd image photography section side on a 1st conversation person side. When it has the 2nd image selection section further, the 2nd image selection section chooses one side of the image sent from the 2nd image photography section side, and the 2nd background image taken out from the background image storage section, and delivery and the 2nd graphic display section display the image sent from the 2nd image selection section side on a 2nd graphic display section side at a 1st conversation person side.
[0022] The 1st voice input section inputs the voice by the side of the 1st conversation person, and sends it to a 1st voice output section side. The 1st voice output section outputs the voice sent from the 1st voice input section side to a 2nd conversation person side. The 2nd voice input section inputs the voice by the side of the 2nd conversation person, and sends it to a 2nd voice output section side. The 2nd voice output section outputs the voice sent from the 2nd voice input section side to a 1st conversation person side.
[0023] When it has the 1st image-processing section further, moreover, the 1st image-processing section The image processing of the image photoed in the 1st image photography section and the 1st background image taken out from the background image storage section is carried out. Delivery and the 1st image selection section choose one side of the image by which the image processing was carried out, and the 1st background image to a 1st image selection section side for the image by which the image processing was carried out, and the 1st graphic display section displays the selected image. this image processing -- ** -- the processing which carries out image composition of the image and the 1st background image which were photoed in the 1st image photography section, and ** -- it is the processing which extracts the profile of the image photoed in the 1st image photography section.
[0024] in addition, when it has the 2nd image-processing section further The 2nd image-processing section carries out the image processing of the image photoed in the 2nd image photography section, and the 2nd background image taken out from the background image storage section. Delivery and the 2nd image selection section choose one side of the image by which the image processing was carried out, and the 2nd background image to a 2nd image selection section side for the image by which the image processing was carried out, and the 2nd graphic display section displays the selected image. this image processing -- ** -- the processing which carries out image composition of the image and the background image of 21 which were photoed in the 2nd image photography section, and ** -- it is the processing

which extracts the profile of the image photoed in the 2nd image photography section.

[0025] Moreover, if the 1st background image and the 2nd background image which are taken out from the background image storage section are made the same, the 1st graphic display section and the 2nd graphic display section will display the same background image.

[0026] Moreover, when it has further the background phonetic memory section and the 1st speech processing section, the 1st speech processing section carries out [voice / 1st / voice / which has been sent from the 1st voice input section /, and / which was taken out from the background phonetic memory section / background] speech processing, and delivery and the 1st voice output section output the voice by which speech processing was carried out to a 1st voice output section side at a 2nd conversation person side.

[0027] In addition, when it has the 2nd speech processing section further, the 2nd speech processing section carries out [voice / 2nd / voice / which has been sent from the 2nd voice input section /, and / which was taken out from the background phonetic memory section / background] speech processing, and delivery and the 2nd voice output section output the voice by which speech processing was carried out to a 2nd voice output section side at a 1st conversation person side.

[0028] Moreover, if there is the same the 1st background voice and the 2nd background voice which are taken out from the background phonetic memory section, the 1st voice output section and the 2nd voice output section will output the same background voice.

[0029] Moreover, when it has two or more sorts of 1st voice input sections and considers as the mode which can carry out selection use, the 1st conversation person chooses and uses the voice input section of arbitration from the voice input section of these two or more kinds. In addition, when it has two or more sorts of 2nd voice input sections and considers as the mode which can carry out selection use, the 2nd conversation person chooses and uses the voice input section of arbitration from the voice input section of these two or more kinds.

[0030] Moreover, when it has two or more sorts of 1st voice output sections and considers as the mode which can carry out selection use, the 1st conversation person chooses and uses the voice output section of arbitration from the voice output section of these two or more kinds. In addition, when it has two or more sorts of 2nd voice output sections and considers as the mode which can carry out selection use, the 2nd conversation person chooses and uses the voice output section of arbitration from the voice output section of these two or more kinds.

[0031] Conversation of the headphone with a microphone of one apparatus, then a more natural form is realized for the 1st voice input section and the 1st voice output section. Similarly, conversation of the headphone with a microphone of one apparatus, then a more natural form is realized for the 2nd voice input section and the 2nd voice output section.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the block diagram of the bidirectional picture transmission conversational system concerning the 1st example of this invention.
[Drawing 2] It is the block diagram of the bidirectional picture transmission conversational system concerning the 2nd example of this invention.
[Drawing 3] a part of bidirectional picture transmission conversational system concerning the 2nd example of this invention -- it is the plot plan of a component.
[Description of Notations]
10 11 [-- 50 A microphone, 51 / -- 60 A loudspeaker, 61 / -- The image selection section, 70 / -- 80 The background image storage section, 81 / -- 90 A control unit, 91 / -- The image-processing section, 100,101 / -- The speech processing section, 110 / -- Background phonetic memory section.] -- 20 A conversation person, 21 -- 30 A camera, 31 -- 40 TV monitor, 41
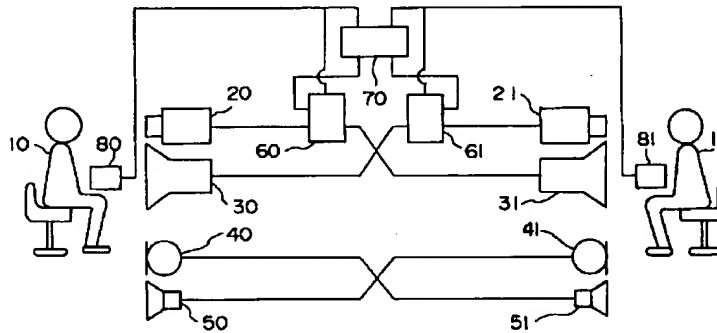

[Translation done.]

17

【図3】本発明の第2の実施例に係る双方向画像伝送会
話システムの一部構成要素の配置図である。
【符号の説明】
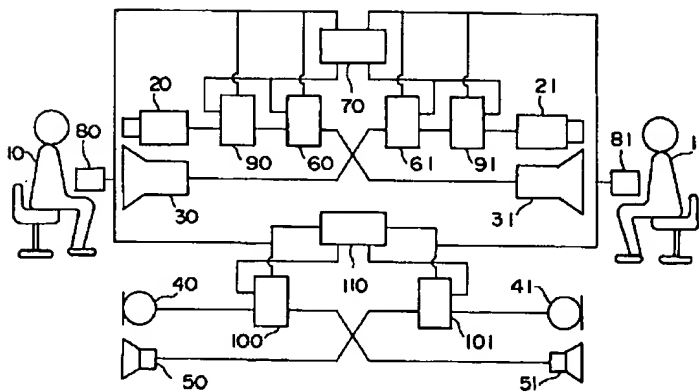10，11…会話者、20，21…カメラ、30，31
…TVモニタ、40，41…マイクロホン、50，51

18

…スピーカ、60，61…映像選択部、70…背景映像
記憶部、80，81…コントロールユニット、90，9
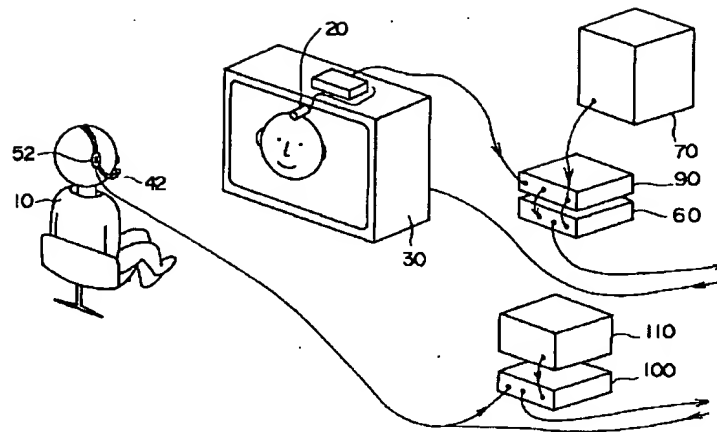1…画像処理部、100，101…音声処理部、110
…背景音声記憶部。

【図1】

70: backgroud image memory
20: Camera
60: image selection pectin
31/30: TV monitor
40: microphone
51: Loudspeaker
80: Control unit

【図2】

110: backgroud voile memory
91/90: image processing pectin
100: Speech processing

【図3】